

Publications of the Week

**A Modified Fluctuation Assay Reveals a Natural Mutator Phenotype That Drives Mutation Spectrum Variation within *Saccharomyces cerevisiae***

First Author: Pengyao Jiang (pictured, third from right) | Senior Author: Kelley Harris (second from left) eLife | UW



The authors use natural polymorphisms to detect historical mutation spectrum differences among several wild and domesticated *S. cerevisiae* strains. To determine whether these differences are likely caused by genetic mutation rate modifiers, they use a modified fluctuation assay with a CAN1 reporter to measure *de novo* mutation rates and spectra in 16 of the analyzed strains. [Profile](#) | [Abstract](#)

**Pharmacologic Therapy for Engraftment Arrhythmia Induced by Transplantation of Human Cardiomyocytes**

First Author: Kenta Nakamura | Senior Author: Charles Murry (pictured) Stem Cell Reports | The Institute for Stem Cell and Regenerative Medicine, Sana Biotechnology, and UW



Cardiac revascularization with transplantation of human pluripotent stem cell-derived cardiomyocytes is a promising preclinical therapy to restore function. Recent large animal data, however, have revealed a significant risk of engraftment arrhythmia (EA). The authors use a porcine model to provide proof-of-concept evidence that a combination of amiodarone and ivabradine can effectively suppress EA. [Abstract](#)

**Signature Morpho-Electric, Transcriptomic, and Dendritic Properties of Human Layer 5 Neocortical Pyramidal Neurons**

First Author: Brian Kalmbach (pictured, right) | Senior Author: Jonathan Ting (left) Neuron | The Allen Institute for Brain Science, the Swedish Neuroscience Institute, and UW



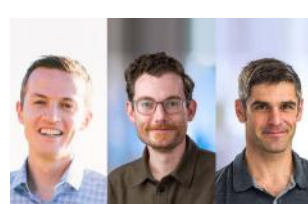
The authors leveraged the recent discovery of a transcriptomically defined layer 5 (L5) extratelencephalic-projecting (ET) neuron type to study the properties of human L5 ET neurons in neocortical brain slices derived from neurosurgeries. Patch-seq recordings, where transcriptome, physiology, and morphology were assayed from the same cell, revealed many conserved morpho-electric properties of human and rodent L5 ET neurons. [Abstract](#) | [Press Release](#)

[View All Publications](#)

Awards

**These Three Seattle Scientists Study the Coronavirus. Now They're Getting Millions to Chase Their 'Wildest Scientific Ideas'**

The Seattle Times



Dr. Trevor Bedford (pictured, center), Dr. Frederick Maiten IV (right), and Dr. David Veesler (left) are among 33 researchers recognized this year by the Howard Hughes Medical Institute, the largest private biomedical research institution in the nation. The Maryland-based nonprofit is awarding the group of scientists with \$300 million — about \$9 million per person — to “chase their wildest scientific ideas”. [Read More](#)

[View All Awards](#)

Local News

**Gut Bacteria Might Be an Indicator of Colon Cancer Risk**

UW Medicine



A study published in the journal *Cell Host and Microbe* reported that the increased presence of certain bacteria in a gut biome indicates a greater likelihood that colon polyps will become cancerous. Dr. William DePaolo, Associate Professor at the UW School of Medicine, tracked 40 patients who had undergone routine colonoscopies and had biopsies taken near the polyps to identify bacteria present at relatively higher levels compared with those of patients who were polyp-free. [Read More](#)

**New Method Speeds Variant Tracking from Weeks to Hours**

UW Medicine



UW School of Medicine Microbiology Professor Dr. Evgeni Sokurenko (pictured) is drawing a line in the efforts to identify and track variants of the COVID-19 virus. Alongside ID Genomics, which Dr. Sokurenko founded, his laboratory is leading the creation and future implementation of a new method to “fingerprint” all currently known variants. The method identifies the presence of dozens of mutations at once and requires only three ingredients. [Read More](#)

**Seagen and Genmab Announce FDA Accelerated Approval for TIVDAK™ (Tisotumab Vedotin-Tftv) in Previously Treated Recurrent or Metastatic Cervical Cancer**

Seagen



Seagen and Genmab announced that the US Food and Drug Administration has granted accelerated approval to TIVDAK™, the first and only approved antibody-drug conjugate for the treatment of adult patients with recurrent or metastatic cervical cancer with disease progression on or after chemotherapy. TIVDAK™ is approved under the FDA's Accelerated Approval Program based on tumor response and the durability of the response. [Read More](#)

**Alpine Raises \$91M to Fuel the Seattle Biotech's Clinical Trials for Lupus and Cancer**

GeekWire



Alpine Immune Sciences will move a potential treatment for immune conditions into human testing and support its ongoing trials for cancer thanks to around \$91 million in new funding. The funding will fuel Alpine's program developing ALPN-303, designed to treat lupus and other inflammatory diseases. It will also support clinical studies of ALPN-202, which is designed to prompt an immune response against tumor cells. [Read More](#)

**BBI's Dr. Doug Fowler: Q&A on NHGRI's Bold Predictions for Human Genomics by 2030**

Brotman Baty Institute (BBI)



Dr. Doug Fowler (pictured) presented at the National Human Genome Institute's (NHGRI) “Bold Predictions” Seminar. He believes clinical relevance of all encountered genomic variants will be readily predictable, rendering the diagnostic designation “variant of uncertain significance” obsolete. Joining him was Dr. Heidi Rehm of the Broad Institute and Harvard Medical School and Massachusetts General Hospital. [Read More](#)

**Adaptive Biotechnologies' New HQ: Co-Founders Show Off 100K Square-Foot Space in Seattle**

GeekWire



After doubling its workforce during the pandemic, Adaptive Biotechnologies finally has room to grow. The company, led by Co-Founders Chad (pictured, left) and Harlan (right) Robins, cut the ribbon on its new 100,086 square-foot headquarters in Seattle's South Lake Union neighborhood. Adaptive markets kits that test for COVID-19, blood cancer and more, and its multiple drug company partnerships include COVID-19 vaccine and cancer cell therapy research projects. [Read More](#)

**Life Lessons in Genetics, Race and Social Justice**

Fred Hutch



Kids want to understand what the science is behind race, racism and genetics. And their teachers are desperate to figure out how to teach this complex topic without accidentally stepping onto a sociopolitical land mine. Fortunately, “Race, Racism and Genetics” is the name of a curriculum unit created by the staff of the Science Education Partnership at Fred Hutch. Its aim? To help high school science teachers navigate the sticky wicket that is race and genetics. [Read More](#)

[View All Articles](#) | [Submit an Article](#)

**Upcoming Events in Seattle**

- September 28 3:00 PM **VIDD Scientific Seminar Series** Online
- September 30 1:00 PM **ISCRM Fall Symposium & Mixer 2021** UW South Campus Center
- September 30 6:00 PM **Nir Barzilai with Dr. Nathan Price – Health Span, Life Span, and the New Science of Longevity** Online
- October 2 6:00 PM **Desert Sun Guild Fall Gala** Michele's Event Center
- October 4-6 8:00 AM **5th Workshop on Virus Dynamics** Online

[View All Events](#) | [Submit an Event](#)

**Science Jobs in Seattle**

- Postdoctoral Research Associate, Mucosal Immunology**  
Benaroya Research Institute at Virginia Mason
- Faculty Position, Cancer Immunology**  
Fred Hutch
- Research Scientist II**  
Seattle Children's
- Senior Scientist, Oncology Research**  
bluebird bio
- Quality Engineer**  
Adaptive Biotechnologies

[View 130 Other Science Jobs](#) | [Submit a Job](#)

**200th Episode Contest**  
Subscribe for a chance to win a Stem Cell Podcast bluetooth speaker.

Submit your articles and events by reaching out to us at [info@scienceinseattle.com](mailto:info@scienceinseattle.com).

BROUGHT TO YOU BY

